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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/711,691	11/13/2000	Achim Michael Nuebling	39199-9505	7139

23409 7590 02/12/2003

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EXAMINER

TRAN, TAM D

ART UNIT PAPER NUMBER

2676

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/711,691

Applicant(s)

NUEBLING ET AL.

Examiner

Tam D. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 2 is objected to because of the following informalities: space should be placed between "is" and "electrocardiogram". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 41 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. The claim 41 contains numerous limitation that lack proper sufficient antecedent basis.

The examiner list the following examples:

- a. "the current waveform", "the first waveform", "the waveform array", in claim 41, lines 16-17;

- b. "the current data point", "the current coordinate", in claim 41, lines 27-28;

Thoroughly review all the claims and correct all improper antecedent basis for the phrases listed above and any additional phrases found.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-59 are rejected under 35 U.S.C. 102(b) as being anticipated by Trautman (USPN 5121470).

6. In regard to claim 1, 23, 42, Trautman teaches a method of a system for displaying physiological patient data from a cyclic physiological waveform, the patient data including a plurality of data points, each data point representing the amplitude of the physiological patient data, the method comprising the acts of: acquiring the physiological patient data; and displaying the physiological patient data in a three dimensional representation. See col.10 line 26-56.

7. In regard to claims 2-5, 16-19, 26, 27, 45, 46, Trautman teaches a method of a system for displaying physiological patient data, wherein it is inherent that physiological data is electrocardiogram data, blood pressure data, cardiac output data, pulse oximetry data. See col.10 line 26-56.

8. In regard to claims 6, 7, 20, 28, 29, 48, Trautman teaches a method of a system for displaying physiological patient data, wherein physiological patient data are stored in memory. See col.6 lines 53-61.

9. In regard to claims 8-10, 12, 21, 30, 37, 38, 49, 56-58 Trautman teaches a method of a system for displaying physiological patient data, having parsing the physiological patient data into a series of waveforms, median waveforms (displaying waveform in the work window). See col.7 lines 1-5.

10. In regard to claims 11, 13, 47, 53, 54, 55 Trautman teaches a method of a system for displaying physiological patient data, wherein data are display on one or more axes (the act of displaying further includes the act of assigning a representative X coordinate, Y coordinate, and

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Z coordinate, to each data point and plotting each data point on the display to produce a three dimensional representation). See col.1 lines 65-67.

11. In regard to claims 14, 22, Trautman teaches a method of a system for displaying physiological patient data, wherein data are display on one or more axes. It is inherent that signal data for displaying has specific range. See col.1 lines 65-67.

12. In regard to claim 15, Trautman teaches a method of a system for displaying physiological patient data, the method comprising: acquiring the physiological patient data; storing the physiological patient data in a memory array; and displaying the physiological patient data in a three dimensional representation, the act of displaying including parsing the physiological patient data into a series of waveforms such that each successive waveform is plotted in a temporal alignment to allow detection of long term trends in physiological data, the act of parsing each waveform into a series of successive data points such that each data point has a coordinate that is plotted on the display to produce a three dimensional representation, each successive data point having a discrete amplitude, and assigning a color according to the amplitude of the data point if the amplitude is within the relevant range. See col.10 line 26-56.

13. In regard to claim 24, 43, Trautman teaches a method of a system for displaying physiological patient data, and comprising monitors device as the source of physiological patient data. See col.1 lines 15-20.

14. In regard to claim 25, 44, Trautman teaches a method of a system for displaying physiological patient data, it is inherent that electronic system having sensor or transducer.

15. In regard to claims 31-33, 40, 50-52, 59 Trautman teaches a method of a system for displaying physiological patient data, and comprising monitors device as the source of

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physiological patient data. See col.1 lines 15-20. It is inherent that the monitor (display) can be black-white or color and having pixels.

16. In regard to claims 34-36, 39, Trautman teaches a method of a system for displaying physiological patient data, it is inherent that the electronic system has processor and software.

17. In regard to claim 41, A software program for generating a display of physiological data from a cyclic physiological waveform, the software program comprising:(a) a program module for acquiring the physiological patient data; (b) a program module for storing the physiological patient data in a memory array; (c) a program module for displaying a three dimensional representation; see col.10 line 26-56;

(d) a program module for setting the current waveform to the first waveform in the waveform array; (e) a program module for providing a Z coordinate counter and initializing the Z coordinate counter to zero; (f) a program module for providing a X coordinate counter and initializing the X coordinate counter to zero; (g) a program module for providing a Y coordinate counter and initializing the Y coordinate counter to zero; see col.1 lines 65-67;

(h) a program module for providing a determining the pixel color based on the Y coordinate of the data point; (i) a program module for plotting the current data point of the current waveform at the current coordinate in the color determined in (h); See col.1 lines 15-20;

(j) a program module for incrementing the X coordinate counter and repeating (h) and (i) until all data points in the current waveform are plotted; and (k) a program module for incrementing the Z coordinate counter and repeating (h)-(j) until all waveforms in the waveform array are plotted; see col.1 lines 65-67.

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18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 form.

Conclusion

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tam D. Tran** whose telephone number is **703-305-4196**. The examiner can normally be reached on MON-FRI from 8:30 – 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Matthew Bella** can be reached on **703-308-6829**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)


Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Tam Tran

TT
Examiner

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MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
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